

# Mineral Industry Surveys

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For information, contact:

Robert D. Brown, Jr., Bismuth Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4984, Fax: (703) 648-7757  
E-mail: [rbrown@usgs.gov](mailto:rbrown@usgs.gov)

Carolyn Crews (Data)  
Telephone: (703) 648-7949  
Fax: (703) 648-7975

MINES FaxBack: (703) 648-4999  
Internet: <http://minerals.usgs.gov/minerals>

## BISMUTH IN THE FIRST QUARTER 1999

Bismuth consumption decreased in the United States during the first quarter of 1999 when compared to the fourth quarter of 1998. This decrease was slightly more than 1%, but when compared to the first quarter of 1998, domestic consumption was 9% higher in 1999. Compared to that of the previous quarter, consumption in the chemical sector increased nearly 13%, that in the alloys sector decreased almost 14%, while consumption in the additive sector remained constant.

Imports decreased during the first two months of the year, but the largest suppliers in order of shipments, remained Belgium, the United Kingdom, Mexico, and China. The top two accounted for 61% of imports, and Mexico and China accounted for another 37%.

The New York dealer price, as published by *Platt's Metals Week* was \$3.40 per pound on March 31. It began the year at \$3.15 per pound, remained steady in January, rose gradually in February, and remained steady in March. This slow increase in price for bismuth is felt to be owing to a balance of supply and demand factors. World demand has increased only moderately. There has been a shortage of high grade bismuth from Peru owing

to the processing of concentrates from copper production that contain high amounts of silver and lead in preference to the bismuth-containing concentrates. The Chinese are thought to be withholding bismuth from the world market, but knowledge that supplies are available keeps prices from rising quickly (*Mining Journal*, 1999).

### Update

March imports of bismuth metal dropped to 135 metric tons, making the first quarter total 471 metric tons. This was a 15% decrease when compared with the fourth quarter of 1998 and a 36% decrease compared to the first quarter of 1998. If the same pace continues all year, imports, the only source of primary bismuth in the United States, would total about 1,880 metric tons. The New York dealer price for bismuth was \$3.70 per pound on June 24, having peaked at \$3.75 per pound at the end of May.

### Reference Cited

*Mining Journal*, 1999, Minor metals run out of steam: *Mining Journal*, v. 332, no. 8526, April 9, p. 267.

TABLE 1  
SALIENT BISMUTH STATISTICS 1/

(Kilograms, unless otherwise specified)

	1998 p/	1999 First quarter
Consumption	1,990,000	505,000
Exports 2/	245,000	NA
Imports for consumption	2,720,000	NA
Price per pound, dealer, end of period	\$3.15	\$3.40
Stocks, end of period, consumer	175,000 r/	140,000

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits.

2/ Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

TABLE 2  
BISMUTH METAL CONSUMED IN THE UNITED STATES, BY USE 1/

(Kilograms)

Use	1998 p/	1999 First quarter
Chemicals 2/	884,000	213,000
Bismuth alloys	741,000	191,000
Metallurgical additives	335,000	92,200
Other	32,000	8,000
Total	1,990,000	505,000

p/ Preliminary.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes industrial and laboratory chemicals, cosmetics, and pharmaceuticals.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF BISMUTH METAL , BY COUNTRY 1/

(Kilograms)

Country	1998			1999 2/	
	Year total	December	Fourth quarter	January	February
Belgium	739,000	54,800	107,000	35,200	85,600
Canada	155,000	20,700	44,500	3,200	2,420
China	385,000	35,200	74,300	35,900	22,000
Germany	45,400	--	6,030	--	--
Italy	850	--	100	--	--
Japan	1,200	--	300	200	--
Mexico	807,000	114,000	191,000	34,500	31,300
Netherlands	295	--	--	280	304
Peru	68,800	--	--	--	--
Russia	19,200	19,200	19,200	--	--
Spain	400	--	200	--	--
Taiwan	1,440	--	--	--	--
United Kingdom	492,000	29,900	110,000	35,100	50,100
Total	2,720,000	274,000	552,000	144,000	192,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ March data not available at the time of publication.

Source: Bureau of the Census.

TABLE 4  
U.S.EXPORTS OF BISMUTH METAL, ALLOYS, AND WASTE AND SCRAP, BY COUNTRY 1/

(Killograms, metal content)

Country	1998			1999 2/	
	Year total	December	Fourth quarter	January	February
Argentina	40	40	40	--	--
Australia	17	--	--	--	--
Belgium	84,200	--	14,400	26,800	--
Canada	80,000	27,100	37,300	10	27,600
China	1,310	--	--	--	--
Dominican Republic	2,400	87	638	95	--
Finland	1,140	--	--	--	--
Germany	32,100	16,800	16,800	--	--
Israel	696	--	--	--	--
Korea, Republic of	150	--	--	--	--
Malaysia	5,970	5,360	5,360	--	--
Mexico	5,190	--	908	--	--
Philippines	210	--	--	--	--
Saudi Arabia	50	--	50	--	--
Singapore	5,470	--	4,350	200	150
Taiwan	1,610	868	868	--	40
Trinidad and Tobago	--	--	--	2,000	--
United Kingdom	24,300	9,580	9,580	44	830
Total	245,000	59,900	90,200	29,200	28,600

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ March data not available at the time of publication.

Source: Bureau of the Census.